

What is Claimed:

1. A system comprising:

a mobile communications device capable of communicating over a wireless network;

a printer coupled to a port of the communications device through which printing information received by the communications device over the wireless network is transmitted to the printer, the printer comprising a controller to print output based on the printing information transmitted to the printer.

2. The system of Claim 1, wherein the mobile communications device comprises a handheld device.

3. The system of Claim 2, wherein the mobile communications device comprises a cellular telephone.

4. The system of Claim 2, wherein the mobile communications device comprises a personal digital assistant.

5. The system of Claim 1, wherein the printing information comprises an image.

6. The system of Claim 1, wherein the wireless network comprises a digital network.

7. The system of Claim 1, wherein the wireless network comprises the Internet.

8. A system comprising:

mobile communication means for communicating over a wireless network;

printing means for printing output based on printing information received from a port of the mobile communications means through which information received by the mobile communications means over the wireless network is transmitted.

9. A printer comprising:

a port that is constructed and arranged to communicate with a mobile communications device capable of communicating over a wireless network; and

a controller to print output based on printing information received by the mobile communications device over the wireless network and transmitted to the printer through the port.

10. The printer of Claim 9, wherein the mobile communications device comprises a handheld device.

11. The printer of Claim 10, wherein the mobile communications device comprises a cellular telephone.

12. The printer of Claim 10, wherein the mobile communications device comprises a personal digital assistant.

13. The printer of Claim 9, wherein the printing information comprises an image.

13. The printer of Claim 9, wherein the wireless network comprises a

digital network.

15. The printer of Claim 9, wherein the wireless network comprises the Internet.

16. In a printer, a method comprising steps of:

- (A) receiving printing information from a mobile communications device, wherein the printing information is received by the mobile communications device over a wireless network; and
- (B) printing output based on the printing information.

17. The method of Claim 16, wherein the step (A) comprises a step of receiving the printing information from the mobile communications device through a port of the printer that is coupled to a port of the mobile communications device.

18. The method of Claim 16, wherein the printing information comprises an image.

19. The method of Claim 16, wherein the wireless network comprises the Internet.

20. A system comprising:

a mobile communications device having a mode of operation in which the mobile communications device communicates over an internet and enables a user to interact with the internet using an interface provided by the mobile communications device;

a printing server capable of serving printing information to the mobile communications device over the internet; and

a printer coupled to a port of the mobile communications device

through which printing information served by the printing server to the mobile communications device over the internet while the mobile communications device is operating in said mode of operation may be transmitted to the printer.

21. The system of Claim 20, wherein the mobile communications device comprises a cellular telephone.

22. The system of Claim 20, wherein the internet comprises the public Internet.

23. The system of Claim 20, wherein the printing information served by the printing server to the mobile communications device comprises an image to be printed by the printer.

24. A system comprising:

mobile communications means having a mode of operation in which the mobile communications device communicates over an internet and enables a user to interact with the internet using an interface provided by the mobile communications means;

printing server means capable of serving printing information to the mobile communications means over the internet; and

printer means coupled to a port of the mobile communications means through which printing information served by the printing server means to the mobile communications means over the internet while the mobile communications means is operating in said mode of operation may be transmitted to the printer means.

25. A printer comprising:

a port coupled to a port of a mobile communications device, the mobile communications device having a mode of operation in which the mobile communications device communicates over an internet and enables a user to interact with the internet using an interface provided by the mobile communications device, the port of the printer being constructed and arranged to receive from the mobile communications device printing information served by a printing server to the mobile communications device over an internet while the mobile communications device is operating in said mode of operation; and

a controller to receive the printing information and produce printed output based on the printing information.

26. The printer of Claim 25, wherein the mobile communications device comprises a cellular telephone.

27. The printer of Claim 25, wherein the internet comprises the public Internet.

28. The printer of Claim 25, wherein the printing information comprises an image to be printed by the printer.

29. In a printer, a method comprising steps of:

(A) receiving, from a mobile communications device having a mode of operation in which the mobile communications device communicates over an internet and enables a user to interact with the internet using an interface provided by the mobile communications device, printing information transmitted to the mobile communications device over the internet by a printing server; and

- (B) printing output based on the printing information received in the step (A).

30. The method of Claim 29, wherein the mobile communications device comprises a cellular telephone.

31. The method of Claim 29, wherein the internet comprises the public Internet.

32. The method of Claim 29, wherein the printing information transmitted by the printing server to the mobile communications device comprises an image to be printed by the printer.

33. In a printing server, a method comprising a step of:

- (A) transmitting printing information to a printer through a mobile communications device having a mode of operation in which the mobile communications device communicates over an internet and enables a user to interact with the internet using an interface provided by the mobile communications device, said step of transmitting being performed while the mobile communications device is operating in said mode of operation.

34. The method of Claim 33, wherein the mobile communications device comprises a cellular telephone.

35. The method of Claim 33, wherein the internet comprises the public Internet.

36. The method of Claim 33, wherein the printing information transmitted by the printing server comprises an image to be printed by the printer.

37. The method of Claim 33, wherein the printer comprises a port that

receives the printing information transmitted by the printing server from a port of the mobile communications device.

38. The method of Claim 33, wherein the printing information comprises processed printing information, and wherein the method further comprises a step of:

- (A) prior to the step (A), modifying source printing information based on capabilities of the printer to produce the processed printing information.

39. The method of Claim 38, wherein the step (B) comprises a step of modifying the spatial resolution of the source printing information to produce the processed printing information, whereby the processed printing information has a spatial resolution at which the printer is capable of printing.

40. The method of Claim 38, wherein the step (B) comprises a step of modifying the color depth of the source printing information to produce the processed printing information, whereby the processed printing information has a color depth at which the printer is capable of printing.

41. A method comprising steps of:

- (A) transmitting printing information to a printer through a mobile communications device having a mode of operation in which the mobile communications device communicates over an internet and enables a user to interact with the internet using an interface provided by the mobile communications device, said step of transmitting being performed while the mobile communications device is operating in said mode of operation;
- (B) receiving, from the mobile communications device while the mobile communications device is operating in said mode of

operation, the printing information transmitted to the printer;  
the printing information transmitted to the printer; and

- (C) printing output based on the printing information received in the step (B).

42. The method of Claim 41, wherein the mobile communications device comprises a cellular telephone.

43. The method of Claim 41, wherein the internet comprises the public Internet.

44. The method of Claim 41, wherein the printing information transmitted in the step (A) comprises an image to be printed by the printer.

45. A system comprising:

a mobile communications device through which a user conducts a transaction service over a first wireless network;

a printing server that serves printing information over a second wireless network in response to completion of the transaction; and

a printer coupled to a port of the mobile communications device through which the printer may receive the printing information served by the printing server.

46. The system of Claim 45, wherein the first wireless network comprises an analog network and the second wireless network comprises a digital network.

47. The system of Claim 45, wherein the first wireless network comprises the Internet.

48. The system of Claim 45, wherein the second wireless network



comprises the Internet.

49. A system comprising:

mobile communications means through which a user conducts a transaction with a transaction service over a first wireless network;

printing server means for serving printing information over a second wireless network in response to completion of the transaction;

printer means coupled to a port of the mobile communications means through which the printer means may receive the printing information served by the printing server means.

50. A method comprising steps of:

(A) in response to completion of a transaction by a user with a transaction service over a first wireless network using a mobile communications device, transmitting printing information over a second wireless network; and

(B) receiving the printing information from a port of the mobile communications device; and

(C) printing the printing information.

51. The method of Claim 50, wherein the step (A) comprises steps of:

(A) (1) at a printing server, transmitting the printing information to the transaction service; and

(A) (2) transmitting the printing information to the mobile communications device.

52. The method of Claim 50, wherein the step (A) comprises a step of:
- (A) (1) at a printing server, transmitting the printing information to the mobile communications device.

53. The method of Claim 50, wherein the mobile communications device has a mode of operation in which the mobile communications device communicates over an internet and enables a user to interact with the internet using an interface provided by the mobile communications device, and wherein the steps (A) and (B) are performed while the mobile communications device is operating in said first mode of operation.

54. The method of Claim 53, wherein the step (C) is performed while the mobile communications device is operating in said mode of operation.

55. The method of Claim 50, wherein the mobile communications device has a first mode of operation in which the mobile communications device communicates over an internet and enables a user to interact with the internet using an interface provided by the mobile communications device, wherein the mobile communications device has a second mode of operation in which the mobile communications device operates as a modem, wherein the user completes the transaction while the mobile communications device is operating in the first mode of operation, and wherein the step (B) is performed while the mobile communications device is operating in the second mode of operation to transmit the printing information to the printer.

56. The method of Claim 55, further comprising a step of:

- (A) prior to the step (B), placing a telephone call to the mobile communications device to establish a connection to the mobile communications device and to place the mobile communications device in the second mode of operation.

57. The method of Claim 56, wherein the step (D) is performed by the printing server.

58. The method of Claim 56, wherein the step (D) is performed by the transaction service.

59. The method of Claim 50, wherein the mobile communications device has a first mode of operation in which the mobile communications device operates as a wireless telephone, wherein the mobile communications device has a second mode of operation in which the mobile communications device operates as a modem, wherein the user completes the transaction while the mobile communications device is operating in the first mode of operation, and wherein the step (B) is performed while the mobile communications device is operating in the second mode of operation to transmit the printing information to the printer.

60. The method of Claim 59, further comprising a step of:

(D) prior to the step (B), placing a telephone call to the mobile communications device to establish a connection to the mobile communications device and to place the mobile communications device in the second mode of operation.

61. The method of Claim 60, wherein the step (D) is performed by the printing server.

62. The method of Claim 60, wherein the step (D) is performed by the transaction service.

63. In a printing server, a method comprising steps of:

(A) processing source printing information based on capabilities of a printer to produce processed printing information;

- (B) transmitting the processed printing information to the printer over a wireless network through a mobile communications device to which the printer is coupled.

64. The method of Claim 63, further comprising a step of:

- (C) prior to the step (A), obtaining from the printer information descriptive of the capabilities of the printer.

65. The method of Claim 64, wherein the step (C) comprises a step of transmitting the information descriptive of the capabilities of the printer from the printer to the printing server over the wireless network.

66. The method of Claim 63, wherein the step (A) comprises a step of modifying the spatial resolution of the source printing information to produce the processed printing information, whereby the processed printing information has a spatial resolution at which the printer is capable of printing.

67. The method of Claim 63, wherein the step (A) comprises a step of modifying the color depth of the source printing information to produce the processed printing information, whereby the processed printing information has a color depth at which the printer is capable of printing.

68. The method of Claim 63, wherein the mobile communications device comprises a cellular telephone.

69. The method of Claim 63, wherein the wireless network comprises an internet.